REMARKS/ARGUMENTS

Claims 1-66 were pending in the Application.

Claims 1, 3-6, 8-13, 23, 25-28, 30-35, 45, 47-50, and 52-57 have been amended. New claims 67 and 68 have been added. Claims 1-68 remain pending in the Application after entry of this Amendment. No new matter has been entered.

In the Office Action, claims 23-44 stand rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. Claims 23, 25 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Claims 1-66 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,725,428 to Pareschi et al. (hereinafter "Pareschi").

Claim Rejections Under 35 U.S. C. § 101

In order to expedite prosecution of the Application, Applicants have amended independent claims 23 and 35. Thus, Applicants respectfully traverse the rejections and request reconsideration and withdrawal of the rejections based on 35 U.S.C. § 101.

Claim Rejections Under 35 U.S. C. § 112, First Paragraph

Applicants respectfully traverse the rejections and request reconsideration and withdrawal of the rejections based on 35 U.S.C. § 112, first paragraph. At the Examiner's request, Applicants have removed the term "tangible" from the phrase "tangible computer readable medium." Applicants note that the term "tangible" was previously added at the request of the Examiner. Furthermore, Applicants submit that a computer readable medium storing instructions executable by a processed of a computer system as recited in the corresponding claims is not transient as alleged by the Examiner.

Additionally, the Office Action alleges that the term "tangible" as recited in the claims is not supported by the specification. Applicants respectfully disagree. FIG. 4 of the Application discloses a workflow processing system (e.g., WPS 302) including a memory sub-system 408 having ROM 420 and RAM 418 for storing instructions. ROM 420 and RAM 418

and their associated descriptions provide examples of <u>tangible</u> computer readable mediums for storing instructions executable by a processor (e.g., processor(s) 402) of WPS 302 (i.e., a computer system) sufficient to enable one skilled in the art to make and/or use the invention using ROM/RAM devices which are explicitly, if not inherently based on the disclosure, tangible.

Claim Rejections Under 35 U.S. C. § 102(b)

Applicants respectfully traverse the rejections and request reconsideration and withdrawal of the rejections based on Pareschi. In the Office Action, then pending claims 1-66 were rejected under 35 U.S.C. § 102(b) as being anticipated by Pareschi. The Office Action alleges that Pareschi teaches or suggests all of the claimed limitations of the corresponding claims. To anticipate a pending claim, a prior art reference must provide, either expressly or inherently, each and every limitation of the pending claim. (M.P.E.P. § 2131). Applicants respectfully submit that Pareschi fails to disclose at least one of the claimed limitations recited in each of the corresponding claims.

In the Office Action, the Examiner alleges that each of the previously presented arguments are dependent upon the definition of "refinable." The Office Action then alleges that Pareschi teaches the claim limitations as interpreted in light of the specification. As discussed further below, Applicants respectfully disagree. However, in order to expedite prosecution of the Application, Applicants have removed the term "refinable" from the claims, and have amended the claims to further distinguish the claimed limitations from Pareschi. Moreover, Applicants reserve the right to prosecute claims with the term "refinable" in continuation applications.

Claim 1

Claim 1 recites a method of processing a document in a workflow system. The method of claim 1 includes detecting when a document is at a place in a first workflow network that allows attachment of workflow networks associated with the document to the place of the first workflow network. As recited in claim 1, the first workflow network specifies a plurality of operations to be performed on the document including a first operation and a second operation.

As further recited in claim 1, the place enabling attachment of workflow networks associated with the document occurs at a location in the first workflow network after the first operation and before the second operation is performed on the document.

The method of claim 1 further includes determining, when the document is at the place that allows attachment of workflow networks associated with the document, if a second workflow network specified by the document is permitted to be attached to the place of the first workflow network. As recited in claim 1, the second workflow network specifies one or more operations to be performed on the document.

If the second workflow network specified by the document is permitted to be attached to the place of the first workflow network as recited in claim 1, the second workflow network is attached to the place of the first workflow network. Attaching the second workflow network, as recited in claim 1, allows the document to be processed according to the second workflow network before returning, upon completion of processing of the document according to the second workflow, to the place of the first workflow network to continue processing of the document according to the first workflow network before the second operation specified by the first workflow network is performed on the document.

Applicants submit that Pareschi does not teach or suggest each and every claim limitation of claim 1. For example, Applicants submit that Pareschi does not teach or suggest determining, when the document is at the place that allows attachment of workflow networks associated with the document, if a second workflow network specified by the document is permitted to be attached to the place of the first workflow network as recited in claim 1. Applicants further submit that Pareschi fails to teach or suggest attaching the second workflow network, as recited in claim 1, which allows the document to be processed according to the second workflow network before returning, upon completion of processing of the document according to the second workflow, to the place of the first workflow network to continue processing of the document according to the first workflow network before the second operation specified by the first workflow network is performed on the document

a) Determining if a second workflow network specified by the document is permitted to be attached to the place of the first workflow network

As discussed above, claim 1 recited that when the document is at the place that allows attachment of workflow networks associated with the document, a determination is made if a second workflow network specified by the document is permitted to be attached to the place of the first workflow network. If the second workflow network specified by the document is permitted to be attached to the place of the first workflow network as recited in claim 1, the second workflow network is attached to the place of the first workflow network such that the document is processed according to the second workflow network.

Applicants submit that Pareschi does not teach or suggest determining if a second workflow network specified by the document is permitted to be attached to the place of the first workflow network, where the determination is made when the document is at the place that allows attachment of workflow networks associated with the document as recited in claim 1.

Pareschi discloses a grammar that allows user to model a workflow system. (Pareschi: Col. 5, Table 1). In the grammar of Pareschi, there are two main rules: activity-centered rules and document-centered rules. (Pareschi: Col. 5, lines 60-62). In Pareschi, activity rules describe how tasks break down into sub-task (i.e., the different sequences of tasks in a workflow), and document rules describe how documents are decomposed into sub-documents (i.e., how work/access to different portions of a document may be controlled). (Pareschi: Col. 5, line 64 – Col., line 12). Pareschi disclose that both activities and documents are objects described by a set of features, or attribute value pairs. Interdependency between objects are described in the grammar of Pareschi using constraints. (Pareschi: Col. 6, lines 13-19). Pareschi discloses that constraints are relationships between variables. (Pareschi: Col. 6, lines 20-21).

Applicants submit that the activity-centered rules of Pareschi fails to teach or suggest determining if a second workflow network specified by the document is permitted to be attached to the place of the first workflow network as recited in claim 1. In Pareschi, activity rules may express task sequencing. (Pareschi: Col. 8, line 10). However, in Pareschi, activity rules form part of a grammar that is specified by users. Pareschi discloses that when a user

wants to define a process template using the GPSG approach (i.e., the grammar of Pareschi), the user specifies the lexicon of process objects (e.g., <u>activities</u> or documents) and the rules to combine them. (Pareschi: Col. 5, lines 20-23). In Pareschi, after the user specifies/modifies the grammar that provides the sequence of the tasks to be performed on the document using rules and constraints in the grammar, the grammar is then compiled/executed and the rules establish a pre-defined sequence of tasks specified by the user-written grammar. The sequence of tasks in Pareschi is pre-determined when the document is being processed in Pareschi. Thus, the pre-defined <u>sequence of tasks specified by the user in Pareschi</u> fails to teach or suggest that <u>a second workflow network specified by the document</u> as recited in claim 1 is permitted to be attached to the place of the first workflow network.

Furthermore, Applicants submit that the processing of constraints in Pareschi fails to teach or suggest that a determination as recited in claim 1. The processing of the constraints in Pareschi are evaluated to determine <u>whether a particular task should operate</u> on a document object. This is different than <u>if a second workflow network specified by the document is permitted to be attached</u> as recited in claim 1. Pareschi also disclose that only the user can alter the sequence of tasks at run-time. (Pareschi: Col. 5, lines 25-26). Thus, the constrains in Pareschi do not teach or suggest a determination is made if a second workflow network <u>specified by the document</u> is permitted to be attached to the place of the first workflow network.

Moreover, the task sequencing of the activity rules and conditions specified in a grammar <u>by a user</u> in Pareschi is substantially different from the process in claim 1 where a determination is made if a second workflow network specified by the document is permitted to be attached to the place of the first workflow network <u>when the document is at the place that allows attachment of workflow networks associated with the document</u>.

b) Returning, upon completion of processing of the document according to the second workflow, to the place of the first workflow network

Applicants further submit that Pareschi fails to teach or suggest that the document is processed according to the second workflow network before returning, upon completion of

processing of the document according to the second workflow, to the place of the first workflow network to continue processing of the document according to the first workflow network before the second operation specified by the first workflow network is performed on the document as recited in claim 1.

As discussed in previous responses, a refinable place represents a place, node, or location in a first workflow network that can be refined or modified such that a second workflow network may be attached to allow additional operations to be performed on a document. (Application: Paragraph 32; Page 7, lines 13-16). The process of attaching a second workflow network to a first workflow network is referred to as "refinement." (Application: Paragraph 33; Page 7, lines 17-19). The second workflow network is referred to as a "refinement net" and the first workflow network is referred to as a "target net." (Application: Paragraph 33; Page 7, lines 19-20). Attaching a refinement net to a refinable place in a target net implies that when a document processed by the target net enters a place in the target net designated as the refinable place, the document is then routed and processed according to the refinement net before the document is returned to the target workflow for further processing. (Application: Paragraph 33; Page 7, lines 23-27). Applicants' FIG. 2B illustrates one example where a refinement net 205 is attached to a refinable place 202 of a target net 200.

The Office Action alleges that FIGS. 4 and 12 teach or suggest a refinable place as recited in claim 1 (or the feature of "detecting when a document is at a place… enabling attachment of workflow networks associated with the document" as recited in claim 1). Applicants respectfully disagree.

FIG. 4 of Pareschi is as follows:

Activity states ⁄⁄ **Document states**

Inactive ⁄⁄ Undefined

Enable ⁄⁄ Exists

Active ⁄⁄ Inedit
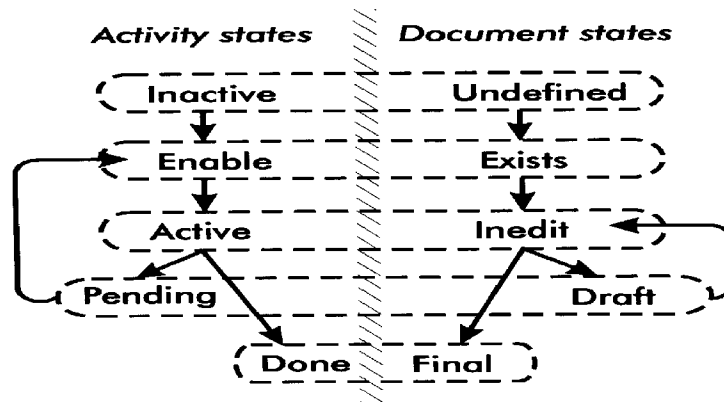
Pending ⁄⁄ Draft

Done ⁄⁄ Final

FIG. 4

FIG. 4 of Pareschi illustrates the coupling of activity states and document states. (Pareschi: Col. 3, lines 36-37). The coupling of the activity states or documents states of FIG. 4 of Pareschi does not teach or suggest a place as recited in claim 1 that represents a place, node, or location in a first workflow network that can be refined or modified such that a second workflow network may be attached. Firstly, in Pareschi, FIG. 4 illustrates a fixed coupling, dual or parallel between states, or other logical attachment between the two sets of states. The fixed coupling between sets of states in FIG. 4 of Pareschi does not teach or suggest a place that represents a place, node, or location in a first workflow network that can be refined or modified such that a second workflow network may be attached as recited in claim 1.

Secondly, Pareschi discloses that the coupling between the activity states and the documents states, is specifically, that a doc feature of an activity is a pointer to the document associated with the task. Similarly, Pareschi discloses that the task feature of a document is a pointer to the activity associated with the document. (Pareschi: Col. 7, lines 33-39). Pareschi merely is indicating that the disclosed grammar can model both activity-triggered processes and document-triggered processes. (Pareschi: Col. 7, lines 45-47). However, FIG. 4 has nothing to do with a place as recited in claim 1. Instead, the pointers between tasks and documents of FIG. 4 provide a fixed, pre-determined coupling between document states and activity states.

Pareschi's FIG. 4 does not teach or suggest a place as recited in claim 1 in a first workflow

network that is refinable or modifiable.

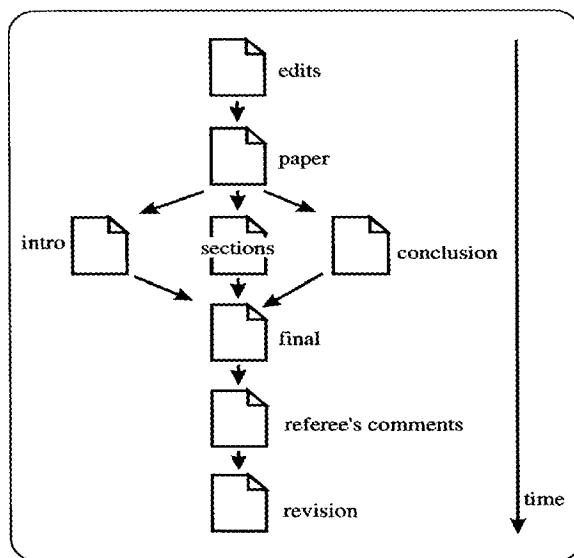FIG. 12 of Pareschi is as follows:

FIG. 12

FIG. 12 of Pareschi illustrates a document view of the multi-authoring process of

FIGS. 8A and 8B. FIGS. 8A and FIGS. 8B (not shown here) illustrate grammar segments for

implementing a collaborative multi-authoring process. Applicants submit that FIG. 12 has

nothing to do "refinable places" as recited in claim 1, but with the states (e.g., "edits" and

"paper") of the collaborative multi-authoring process.

In referring to collaborative processes in the discussion of FIGS. 8A and 8B,

Pareschi describes that document workflows can be decomposable or non-decomposable.

(Pareschi: Col. 10, lines 36-56). In describing how to control access to documents, Pareschi

discloses that decomposable documents have a one-to-one mapping between tasks and portions

of the documents. (Pareschi: Col. 10, lines 15-18 and 28-30). Non-decomposable documents

have a many-to-one mapping between tasks and portions of the documents, and thus require two

distinct coordination solutions for processes that require the sharing of non-decomposable

documents: 1) sequential activities and 2) concurrent activities.

Pareschi further discloses that decomposable processes permit a concurrent flow of activities associated with document parts, while non-decomposable require either a sequential flow (e.g., transitions between states "edits" and "revisions" of FIG. 12) or highly coordinated parallel flows (e.g., transitions between states "paper," "intro," and "final" of FIG. 12) to coordinate access to the documents. The coordination of access, the difference between decomposable and non-decomposable documents, along with the document coordination view of FIG. 12 of Pareschi has nothing to do with a place as recited in claim 1 enabling attachment of workflow networks associated with the document. Pareschi does not teach or suggest that a sequential flow or parallel flow may be attached to a place in a workflow network as recited in claim 1. Instead, Pareschi merely discloses that the GPSG grammar is capable of modeling decomposable documents and processes. (Pareschi: FIGS. 8A and 8B).

Furthermore, even assuming arguendo that the FIG. 12 of Pareschi discloses a workflow network (which Applicants submit it does not, as Pareschi describes FIG. 12 as a document's view of a collaboration process), Pareschi does not disclose that the states in the document flow are refinable or modifiable as recited in claim 1 enabling attachment of workflow networks associated with the document. Pareschi merely discloses that the states are portions of a collaborative processes as viewed by the document.

Moreover, Col. 11, lines 24-38 referenced in the Office Action as allegedly disclosing a "refinable place" as recited in claim 1 merely describes the decomposability or non-decomposability of documents as previously discussed in reference to FIG. 12 for the coordination processes for documents. The decomposability or non-decomposability of a document does not necessarily teach or suggest a place as recited in claim 1 enabling attachment of workflow networks associated with the document.

Applicants further submit that Pareschi fails to teach or suggest attaching a second workflow network to a refinable place of a first workflow network such that upon completion of processing of the document according to the second workflow, processing returns to the place of the first workflow network to continue processing of the document according to the first workflow network before the second operation specified by the first workflow network is

performed on the document as recited in claim 1. Applicants' specification more fully illustrates the difference between Pareschi's states and a place as recited in claim 1. Applicants' FIG. 7B, that follows, provides one example of the different between a refinable place as recited in claim 1 and FIGS. 4 and 12 of Pareschi:
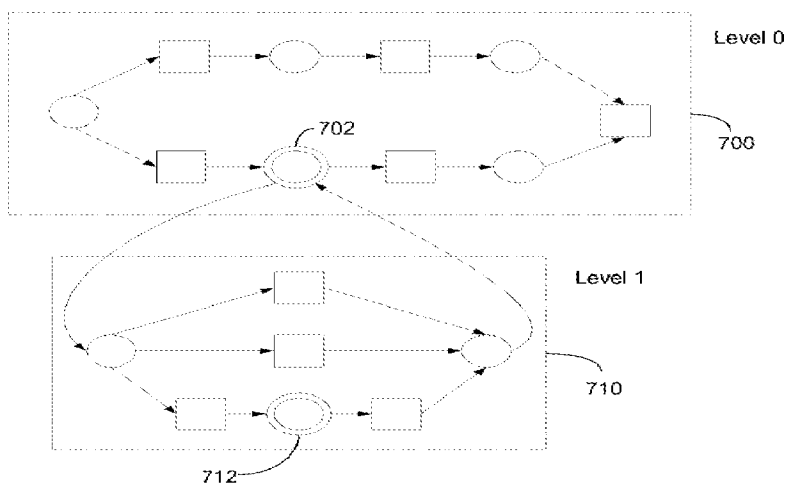

Fig. 7B

As illustrated clearly between Applicants' FIG. 7B and FIGS. 4 and 12 of Pareschi, Pareschi fails to disclose that termination of processing of the document according to a second workflow network transitions to processing of the document according to the first workflow network at the place of the first workflow network enabling attachment of workflow networks associated with the document. Thus, Pareschi fails to teach or suggest that upon completion of processing of the document according to the second workflow, processing returns to the place of the first workflow network to continue processing of the document according to the first workflow network before the second operation specified by the first workflow network is performed on the document as recited in claim 1.

FIG. 12 of Pareschi merely illustrates sequential paths or parallel paths to coordinate document access of non-decomposable documents. Thus, FIG. 12 of Pareschi fails to teach or suggest that upon completion of processing of the document according to the second workflow, processing returns to the place of the first workflow network to continue processing of the document according to the first workflow network before the second operation specified by

the first workflow network is performed on the document as recited in claim 1. FIG. 4 of Pareschi merely indicates the coupling or duality of activity and document states. Thus, FIG. 4 of Pareschi also does not teach or suggest this feature.

Therefore, Applicants submit that Pareschi fails to teach or suggest each and every limitation of claim 1. Thus, Applicants submit that claim 1 is allowable.

Claims 2-68

Applicants submit that independent claims 13, 23, 35, 45, 57, and 67 are allowable for at least a similar rationale as discussed above for the allowability of claim 1, and others. Applicants submit that the dependent claims that depend directly and/or indirectly from the independent claims 1, 13, 23, 35, 45, and 57, are also allowable for at least a similar rationale as discussed above for the allowability of the independent claims. Applicants further submit that the dependent claims recite additional features that make the dependent claims allowable for additional reasons.

Remarks regarding the Office Action

In the Office Action, the Examiner alleges that each of the previously presented arguments are dependent upon the definition of "refinable." The Examiner further alleges on page 2 of the Office Action (see below) that the Applicants have failed to provide any specific page and line number to define Applicant's interpretation of a "refinable" place:

> Applicant present 3 arguments: (a) Detecting a refinable place in a first workflow
> network, (b) Determining if a second work network is permitted to be attached to the
> refinable place of the first workflow network, and (c) Attaching the second workflow
> network to the refinable place of the first workflow network. All of the presented
> arguments addressing the 102 rejection are dependant upon applicant the definition of
> "refinable." But on page 26 of applicants arguments applicant intentionally chooses not
> to define the term refinable on line 13 where applicant "refinement network may specify
> ..." applicant merely provides an example of a embodiments the specification capable of
> meeting the claim limitation. Additionally applicant has failed to provided any specific
> page and line number to define applicants interpretation of "refinable" therefore
> examiner must interpretation claim limitation as broadest possible interpretation of claim
> in view of the specification without importing limitations for the specification. Therefore

However, Applicants <u>did</u> identify and quote from paragraph [32] of the Application in Applicants' previous response to define the term "refinable." While Applicants may not have provided a specific page and line number in Applicants' previous response, Applicants identifies a numbered paragraph in an application, which has been generally accepted as equivalent. Specifically, in the first paragraph on page 26 of Applicants' previous response, Applicants identified and quoted from paragraph [32] of the Application found on page 7 of the Application.

Applicants pointed to and clearly discussed that paragraph [32] (reproduced below) of the Application discloses that a "refinable place" represents a place in a workflow network that can be refined or modified based upon control information associated with a document processed by the workflow network:

> [32]   Like other workflows, active document workflows may also be
> represented using Petri nets comprising transitions (represented by squares) and places
> (represented by circles). According to the teachings of the present invention, a Petri net
> representing an active document workflow comprises at least one refinable place (represented
> by a double circle). The "refinable place" in a Petri net representing an active document
> workflow represents a place in the net that can be refined or modified based upon control
> information associated with a document processed by the workflow. More specifically,
> according to an embodiment of the present invention, a refinable place in a first Petri net
> representing a first workflow corresponds to a node in the first net where a second Petri
> network representing a second workflow can be attached.

Therefore, Applicants <u>did</u> point the Examiner to where one ordinarily skilled in the art would understand the meaning of the term "refinable."

The Examiner in the Office Action further alleges that Applicants intentionally choose not to define the term refinable on line 13 of Applicants' previous response. Applicants respectfully disagree. Applicants clearly defined the term "refinable" by referring to the disclosure in paragraph [32] of the Application before line 13 of Applicants' previous response.

Furthermore, line 13 in paragraph 2 of Applicants' previous response is a discussion of the "process of attaching" a second workflow network to the refinable place, as opposed to what "refinable places" represent as discussed in paragraph 1 of Applicants' previous response. After identifying how one ordinarily skilled in the art would interpret the term "refinable place," Applicants described that in the process of attachment of a workflow network to the refinable place, the attached workflow <u>may specify one or more operations</u> in paragraph 2 of Applicants previous response that includes line 13 reference by the Examiner. Applicants did not intentionally choose not to define the term in Applicants previous response, as the term had already been disclosed and supported in the specification.

The Examiner then states on page 3 of the Office Action:

> if the applicant wished to claim Petri nets applicant must amend claims to included Petri
>
> nets not just workflows, which is broader terminology. Therefore the present rejection
>
> Pareschi teaches the present claim limitation as interpreted in light of the specification.

Applicants fail to see the Examiner's rationale why such an amendment must be made to claim Petri nets, in light of the Examiner's previous misunderstanding and focus on the term "refinable." Applicants, therefore, have removed the term "refinable" from the claims. Applicants maintain that the reference cited by the Examiner still fail to teach or suggest a place or location in a first workflow network that may be modified or refined such that a second workflow network specified by the document may be attached to the place for further processing of the document.

Appl. No. 10/054,749
Amdt. dated October 26, 2006
Amendment under 37 CFR 1.116 Expedited Procedure
Examining Group 2145

PATENT

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

/Sean F. Parmenter/
Sean F. Parmenter
Reg. No. 53,437

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 650-326-2422
SFP:am
60821467 v1